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Corruption and Political Interest: Empirical Evidence at the Micro Level

Benno Torgler* ^{a,b,c} Bin Dong ^a

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Abstract:

The topic of corruption has recently attracted a great deal of attention, yet there is still a lack of micro level empirical evidence regarding the determinants of corruption. Furthermore, the present literature has not investigated the effects of political interest on corruption despite the interesting potential of this link. We address these deficiencies by analyzing a cross-section of individuals, using the World Values Survey. We explore the determinants of corruption through two dependent variables (perceived corruption and the justifiability of corruption). The impact of political interest on corruption is explored through three different proxies, presenting empirical evidence at both the cross-country level and the within-country level. The results of the multivariate analysis suggest that political interest has an impact on corruption controlling for a large number of factors.

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* Corresponding author, e-mail address: benno.torgler@qut.edu.au. We are very grateful to Alison Macintyre and Stan Hurn for her comments.

^a The School of Economics and Finance, Queensland University of Technology, GPO Box 2434, Brisbane, QLD 4001, Australia

^b CREMA – Center for Research in Economics, Management and the Arts, Gellertstrasse 18, CH-4052 Basel, Switzerland

^c CESifo, Poschingerstrasse 5, D-81679 Munich, Germany

I. INTRODUCTION

Research into the determinants of corruption has recently intensified, with an increasing number of studies devoted to exploring the causes and consequences of corruption at the international level. However, most of these studies explore corruption at the macro level while only a limited number of studies have investigated the determinants of corruption at the individual level (see, e.g., Mocan 2004, Swamy et al. 2001, Torgler and Valev 2006). This empirical study aims to identify the determinants of corruption at the micro level by working with a set of individual level data covering a large number of countries. We analyze a cross-section of individuals from the World Values Survey wave III (1995-1997) employing the *perceived corruption* and the *justifiability of corruption* as dependent variables. An additional objective in this paper is to investigate whether political interest affects corruption by working with several different proxies of political interest, i.e. discussion intensity, interest in politics and importance of politics in life. Despite the increasing interest of economists in the determinants of corruption, the link between political interest and corruption has not yet come under intense empirical investigation.

We anticipate that the use of micro-data sets will afford more insights into the corruption literature. However, there are benefits and drawbacks of such a data set. One of the major advantages lies in the ability to investigate a broad set of countries. On the other hand, drawing conclusions from such a large data file could prove problematic since institutional and cultural frameworks in certain countries might influence corruption, and such features cannot always be controlled in a satisfactory manner. To this end, we also provide *within*-country evidence focusing on Switzerland, since the institutions in this country are not homogenous. Analyzing Swiss data is interesting because the degree of institutionalized political participation rights varies strongly between the 26 Swiss cantons.

There are five innovative aspects to this paper: 1) it explores the relationship between political interest and corruption using three different proxies of political interest. Previous studies have not explored this link, but rather have discussed the impact of formal education without considering the impact of political interest or informal education. 2) While we observe a large number of studies at the macro-level, we observe only a limited number of

micro-level studies. Mocan (2004) suggests a possible cause of this deficiency in previous studies: “because corruption data are available only at the aggregate (country) level, existing research has focused on explaining the cross-country variation in corruption. Two exceptions are Swamy et al. (2001) and Svensson (2003)” (p. 2). 3) Most studies at the macro level focus on the *perceived* level of corruption without considering the willingness to bribe (justifiability of corruption). This study explores both aspects in detail. It is interesting to note that by measuring the willingness to accept corruption we are able to investigate the social norms of compliance in a society. 4) We not only provide cross-country evidence at the micro level, but also explore the robustness of this evidence by focusing on a country that has a certain level of institutional variation (i.e. Switzerland). 5) We explore additional interesting factors such as trust in institutions, voice and accountability and democratic participation rights.

Before considering these findings in detail, however, Section II aims to outline our theoretical approach. Section III presents the data and Section IV the empirical findings. Section V finishes then with some concluding remarks.

II. POLITICAL INTEREST

2.1 Theoretical Considerations

Political interest influences the extent to which individuals go about collecting, processing, and interpreting political matters. A government could operate with impunity if no-one is motivated to analyze the information available regarding its activities (Rose-Ackerman 1999). To a certain extent, political interest leads to better supervision and scrutiny of the administration and governance performance and may contribute to a stronger sense of civic awareness among citizens. This increased knowledge possibly augments the ability to acquire political information at lower costs which in turn increases the individual incentive to be informed and to discuss political issues. Hence this process acts as a sort of “multiplier effect”. Rose-Ackerman (1997) states that corruption can be limited “by outside pressure from the public” (p. 143). A politically interested population could

demand a higher level of transparency and may be able to better monitor and control politicians, potentially reducing the perceived complexity of the political process

Politically interested citizens will associate with one another and engage in discussion. Exchange of arguments and face-to-face interaction enhances group identification. and gives citizens the opportunity to identify others' preferences. As others' preferences become visible, the moral costs of free-riding or behaving illegally increase, reducing the justifiability of corruption. If political discussion is common in a society, citizens are confronted with arguments from both sides, those favoring and those opposing a certain political outcome, and this increases the overall level of information. In addition, once citizens become involved in an issue, they feel responsible for the result which may create a sense of civic duty and a higher willingness to comply. Thus, discussion provides the opportunity to clarify benefits and costs of political issues and thus increases co-operation among group members. This increases the human capital involved in and developed by political matters. Mocan (2004) stresses that a higher stock of human capital reduces the tolerance of corruption.

Several studies have found that political interest contributes to the probability of their being involved in the political process (Verba, Scholzman, and Brady 1995). Political interest becomes an important explanatory factor in models of political behaviors from political sophistication (Carpini and Keeter 1996) to voting (Verba, Scholzman, and Brady 1995). Kuenzi (2006) has empirically demonstrated that civic education (non-formal education) has a significant positive impact on political participation. This kind of education is the result of an informal process that is not necessarily a part of an individual's formal education. Nevertheless, individuals certainly invest energy, time and money on this informal education. The expenses involved in being politically interested (represented by the costs of informal education) may outweigh the benefits (represented by increased accountability and transparency of the administration). In our case, we can argue that people balance the cost of maintaining a political interest with the benefit derived from controlling and reducing corruption, (keeping in mind the consequences of corruption). To demonstrate this aspect we first employ a simple model that allows illustration of the relationship between political interest and the level of corruption.

2.2 A Simple Model

We will first explore a general model of bureaucrats' dishonest behavior. Let us assume that there are individuals engaged in production, who receive the same incomes: w . A bureaucrat is responsible for the provision of a public good through a production process requiring a certain infrastructure. The cost of the public good, namely c , is financed with income taxes. We assume that the bureaucrat is able to set the tax rate. So individuals have the motivation to be corrupt, particularly if they do not know the actual cost of the public good or their true tax burden. The bureaucrat can set a higher tax rate and divert the difference (noted by b) between tax revenue and the expenditure on the public good (the *economic rent*), into her/his pocket. Alternatively, the bureaucrat can take advantage of this situation by extorting a payment in exchange for what would seem to be a "favorable" tax assessment, but is in fact the correct tax assessment. Klitgaard (1988) reported that tax inspectors in the Philippines assessed taxpayers and demanded an unrealistically large tax payment. The legal framework meant it was very costly and time-consuming to appeal, and in many cases the taxpayer was unsure of their exact liability. Such a corruption is called *extortive corruption* and exists where bureaucrats have discretionary power in the application of rules in order to extract a rent from the private agent in the form of a bribe (Brunetti and Weder 2003). To avoid the loss from corruption, individuals invest resources to control such behavior, complain or find some way to signal their refusal to accept corruption. Political interest may translate into stronger actions against corruption by identifying illegal treatment and reducing the willingness to accept bribes even when the costs of appealing are very high or the formal mechanisms of internal and external control are not functioning effectively. Politically disinterested individuals may surrender more easily to extortion, as they will not take into account the consequences and issues associated with corruption. Thus, political interest may substantially reduce the costs of fighting extortive corruption. Politically interested persons may find channels to reveal corrupt behavior or at least raise the costs of illegal behavior by demonstrating their higher willingness to use instruments for voicing complaints and threatening to undermine the political support for a government. In addition, the politically interested citizens' process of informal education will uncover political information, helping them understand what is expected of a legitimate government. Such understanding reduces the constraints on potential complaints and puts pressure on the government and the bureaucrats to act in the public interest. This is especially important in countries where other means of constraining bureaucrats and politicians may be lacking. Rose-Ackerman (1999) points out that groups and individuals have effective avenues for challenging official actions. Although

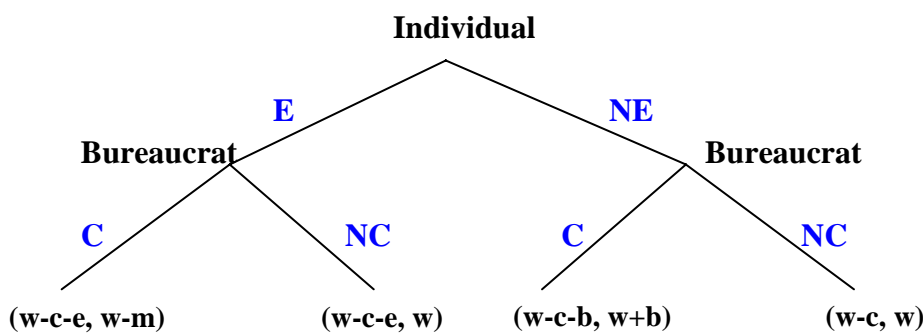
policies that enhance accountability and openness “are likely to be more acceptable to democratically elected leaders, these reforms can also have an effect in undemocratic systems whose leaders nevertheless need public support to retain power” (p. 144). However, it is possible that the government could stonewall any process until the protest groups have exhausted their energy and resources (Rose-Ackerman 1999). Bureaucrats could ignore the threats of lobbyists and protestors in expectation of using such a strategy.

Investing in political information requires time and resources, both of which hold substantial opportunity costs. We identify such information costs as e . We also call e informal education. Such costs may not be independent of living expenses l .

Maintaining the generality of the analysis, we consider the simplest case in which an individual deals with a bureaucrat in a democracy. Furthermore, we assume that their utilities equal their revenues.

The timing of the model proceeds as follows: the individual first decides whether or not to invest in controlling the bureaucrat through pursuing an informal education to obtain political information and maintain a political interest (E or NE). The bureaucrat then chooses whether to be corrupt or not (C or NC) according to the individual’s decision. We therefore make use of a standard game-theoretic concept of equilibrium (see Figure 1).

Figure 1: Game Tree



The individual will forgo informal education when $w-c-e < l$. In this circumstance, the subgame-perfect Nash equilibrium is (NE, C), namely $(w-c-b, w+b)$, which means that such an individual will have no incentive to monitor the bureaucrat.

We then analyze the interesting case where $w-c-e > l$. There are two possible subgame-perfect Nash equilibriums.

(E, NC), namely, $(w-c-e, w)$ if $e < b$;
(NE, C), namely, $(w-c-b, w+b)$ if $e > b$.

We can conclude that an individual will maintain a political interest so long as the cost of relevant informal education is not very large, and corruption will consequently be controlled.

A fundamental premise of the model is that both the individual and the bureaucrat are in a democratic regime. Individuals will face higher costs of monitoring the bureaucrat in a dictatorial regime. Thus, in a democratic society, political interest may reduce corruption to a greater degree than in a less democratic society. However, it should be noted that we will control for the level of accountability when conducting the empirical analysis..

The results imply that individuals will invest in informal education as long as $e < b$. It means individuals will monitor the bureaucrat if the participation cost is not very large. Under these conditions, the bureaucrat's best strategy is to remain honest. Thus, in such circumstances, the political interest of individuals will help to minimize the level of corruption.

III. DATA

The data used in the present study came from World Values Survey wave III. The World Values Survey is a worldwide investigation of socio-cultural and political change. These surveys have assessed the basic values and beliefs of people in many countries. The World Values Survey was first carried out in 1981-83, with subsequent surveys being carried out in 1990-93, 1995-97 and 1999-2001¹. We work with the third wave, as the question referring to individual perceived corruption has *only* been asked in this wave.

For the researchers who conduct and administer the *World Values Survey* (WVS) in their respective countries, it is a requirement that they follow the methodological requirements of the World Values Association.

¹ Data from the 1999-2001 wave became available after our study was completed.

For example, surveys in the World Values Survey set are generally based on nationally representative samples of at least 1000 individuals of 18 years and above (although sometimes people under the age of 18 participate). The samples are selected using probability random methods, and the questions contained within the surveys generally do not deviate far from the original official questionnaire (for a sample of a typical World Values Survey see www.worldvaluessurvey.org).

3.1 Dependent Variables

Our dependent variables are *perceived corruption*, and the *justifiability of corruption*. To assess the level of perceived corruption from the WVS, we use the following question:

How widespread do you think bribe taking and corruption is in this country?

Almost no public officials are engaged in it (1)

A few public officials are engaged in it (2)

Most public officials are engaged in it (3)

Almost all public officials are engaged in it (4)

The justifiability of corruption is measured with the following variable:

Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: (...) someone accepting a bribe in the course of their duties (1=always justified, 10= never justified).

The interpretation of this question is that a higher value leads to lower justifiability of corruption. This variable can be seen as a proxy for social norms of compliance (see Torgler 2007).

The two dependent variables used are not free from biases and problems. Use of ‘perceived corruption’ is in line with other indexes that employ measures of perceptions (such as the Transparency International index). However, perceptions are not objective, nor are they quantitative measures of the actual degree of corruption.

Perceptions are rather an indirect way of measuring corruption (Tanzi 2002). However, when analyzing the Transparency International index, Treisman (2000, pp. 410-411) presents valid arguments as to why data based on perceptions should be taken seriously. Components of the surveys and ratings are highly correlated among themselves, even though they have been conducted with different methodologies, different inputs and in different time periods. Such consistency allows us to conclude that factors are almost free of biases such as a “temporal mood” or guesses. There is also a consistency in the Transparency International over time, although the construction of the index varies over time. Finally, the index is strongly correlated with other corruption indexes such as the ICRG, the BI or the Gallup International.

A practical method by which we can test whether the World Values Survey question about the perceived corruption is through the use of a useful proxy to check whether the variable is correlated with other well-known indexes on corruption. Thus, we compare our variable with the corruption indexes TI (Transparency International), International Country Risk Guide (ICRG) and Quality of Government (Control of Corruption) developed by Kaufmann, Kraay, and Mastruzzi (2003). The World Values Survey Corruption ratings are highly correlated with the TI ($r = -0.878$), the ICRG ($r = -0.680$) and the Quality of Government rating ($r = -0.827$)².

The validity of the *justifiability of corruption* variable can be criticized as it reports a *self-reported* and *hypothetical* choice (see Swamy et al. 2001). It can also be argued that an individual who has engaged in corruption in the past will tend to cover up such behavior by declaring a low justifiability of corruption in the survey. Furthermore, cross cultural comparisons should be treated with some caution. In countries where corruption is widespread and delays in transactions are long, additional payments to “speed up” the process may be justifiable and a normal part of the administration process. The necessity of additional payments is so pervasive in some countries that the bureaucratic mechanism does not operate without them. De Soto (1989) and his research team conducted an experiment in which they set up a small garment factory in Lima with the aim of complying with the bureaucratic procedures and thus behaving in accordance with the law. He reports that 10 times they were asked for a bribe to speed up the process and on two occasions, payment of the bribe was the only way to continue the experiment. However, a side effect from higher justifiability of corruption due to the ubiquitous nature of this behaviour is that the bureaucrats have a stronger incentive to delay the transactions in

² The sign is negative because for all three ratings used (TI, ICRG and Quality of Government), a higher score corresponds to a lower corruption.

order to extract further payments. Justifiability is also correlated with most other corruption measurements: it is statistically significant at the 0.05 level but with lower r values compared to perceived corruption (TI ($r=0.358$), the ICRG ($r=0.187$, not statistically significant), the Quality of Government rating ($r=0.380$), and perceived corruption ($r=-0.421$)).

We have not analyzed the entire World Value Survey data set. Countries below 750 observations have not been included in the estimations to reduce possible biases due to a lack of representativeness³. Furthermore, some countries do not have information on the dependent variables or some of the independent variables. These countries are therefore not considered. Furthermore, not all countries have information regarding the dependent and independent variables integrated in the estimations⁴. For example, Sweden could not be included as one of the control variables (education) has been coded differently.

3.2 Measuring Political Interest

We will use several proxies of political interest to investigate this main hypothesis, thereby checking the robustness of the results. First of all we focus on the intensity of political discussion by using the responses to the following survey question:

Question: *When you get together with your friends, would you say you discuss political matters frequently (value 3), occasionally (value 2) or never (value 1)?*

The second variable focuses on the interest in politics itself:

Question: *How interested would you say you are in politics? Very interested (value 3), somewhat interested (2), not very interested (1).*

The third variable measures the importance of politics in a person's life with the following question:

Question: *How important is politics in your life? very (4), (rather 3), not very (2), not at all (1).*

³ Thus, Montenegro and the Dominican Republic have been omitted.

⁴ For the estimations with the dependent variable perceived corruption: Japan, South Africa, Puerto Rico, China, Columbia. Estimation with justifiability of corruption: Japan, South Africa, Puerto Rico, Turkey and Columbia.

The advantages of using three different proxies are demonstrated by our ability to conduct a robustness test while measuring different dimensions of political interest.

3.3 Further Independent Variables

The correlation between political interest and corruption could be influenced by other variables that affect corruption,, complicating our efforts to isolate the impact of political interest. Thus, we control for the education level, the marital status, political trust, institutional conditions, religion, risk attitudes, the economic situation and the employment status.

a) Education

The variable education⁵ (continuous variable, 1=low, 9=high education) is related to citizens' knowledge about corruption. To observe the relative importance of political interest, it necessary to control for formal education, as it is assumed that better educated individuals are more aware of government's activities and thus would be in a better position to assess the degree of corruption. This may have a positive or a negative impact on the justifiability of corruption and the perceived corruption, depending on the actions of the government. On the other hand, they may be more strongly involved in corruption, understanding better the opportunities of corruption. Thus, the effect of education is not clear and there is a lack of empirical studies that investigate the correlation between education and corruption. Swamy et al. (2001), for example, disregard the variable. Mocan (2004) found that a higher level of education leads to a higher probability of being targeted for bribes, yet a more educated population is expected to be less tolerant of corruption. `

b) Age

⁵ What is the highest educational level that you have attained?

1. No formal education
 2. Incomplete primary school
 3. Completed primary school
 4. Incomplete secondary school: technical/vocational type
 5. Complete secondary school: technical/vocational type
 6. Incomplete secondary: university-preparatory type
 7. Complete secondary: university-preparatory type
 8. Some university-level education, without degree
 9. University-level education, with degree
-

A limited number of studies have included age in their estimations. Swamy et al. (2001) consider age as a control variable in their estimations of the justifiability of corruption and find a positive but non-linear effect. The authors focused on gender differences and did not comment on this result. Mocan (2004) also uses micro data to show an effect of age on corruption: individuals at the age of 20 to 54 are more likely to be asked for a bribe compared to the reference group (younger than 20). Torgler and Valev (2006) explore the impact of age on corruption, differentiating between the same cohorts over time (age effect) as well as the same age groups in different time periods (cohort effect). The paper observes a consistent age effect, while a cohort effect is less obvious. There are two major concepts that explain the correlation between age and crime: the traditional desistance theory and the age theory. The desistance theory asserts that the decline in crime results from factors associated with age that reduce or change the actors' criminality, and older people are restrained from offending due to changes in their status or the exposure to anti-criminal institutions. On the other hand, the age theory is based on the idea that the biological aging of the organism itself has an impact on individuals' criminal behavior (for an overview see Torgler and Valev 2006). Instead of using age as a continuous variable, we have formed four classes: AGE<30, AGE 30-49, AGE 50-64, AGE 65+, with AGE<30 as reference group, to better investigate the impact of age.

c) Gender

Research in social psychology suggests that women are more compliant and less self-reliant than men (e.g., Tittle 1980). In the past decade, experimental research findings have shown that gender may influence aspects of behavior such as charitable giving, bargaining, and household decision making (see Andreoni and Vesterlund 2001, Eckel and Grossman 2001). Evidence from the tax compliance literature shows there is a tendency for men to be less compliant and have a lower tax morale than women (see Torgler 2007). Further evidence regarding gender differences can also be found in helping behavior (see, e.g., Eagly and Crowley 1986) or ethical decision making (Ford et al. 1994, Glover et al. 1997 and Reiss and Mitra 1998).

The criminology literature provides one of the best sources for observing possible gender differences. Mears et al. (2000) report that men commit more offenses than women age “at every age, within all racial or ethnic groups examined to date, and for all but a handful of offense types that are peculiarly female... sex differences in delinquency are independently corroborated by self-report, victimization, and police data, and they

appear to hold cross-culturally as well as historically” (p. 143). Torgler and Valev (2007) find strong evidence that women report a lower justifiability of committing illegal activities than men. The results remain robust after investigating different time periods and extending the specification with several opportunity factors such as education, employment status or income.

d) Marital status

Marital status is a further control variable (dummy variable, value 1 if the respondent is married). Married people may be more compliant than others, especially compared to singles because they are more constrained by their social network (Tittle 1980). It is also argued that marriage alters public behavior (Swamy et al. 2001). Tittle (1980) found significant differences between the different marital statuses, with the greatest evidence for the singles, followed by the separated or divorced. However, controlling for age, the results show that the association between deviance and marital status was a reflection of age difference, as older persons are more likely to be married or widowed and age was a strong predictor concerning the deviance. Gottfredson and Hirschi (1990) also point out that the literature on crime finds that marital status does not seem to have an impact on the likelihood of crime.

e) Economic situation

As a proxy for income we use the economic situation of an individual (dummies *upper class*, *middle* and *lower class* are in the reference group). Using the exact income would produce biases, because of difficulties comparing this variable across different countries. Individuals with a higher income are more likely to be asked for a bribe, as are those with a better education. Individuals with a lower income might have lower social “stakes” or restrictions but are less in a position to take risks, because of a high marginal utility loss (wealth reduction) if they are caught and penalized.

f) Occupation status

Another variable is the occupation status as it affects whether the respondent is in a position to benefit from corruption (see Swamy et al. 2001). We will use a dummy variable for self-employed individuals as they might be

in the best position to invest in bribing and benefit from corruption. Such a status may have an impact on the norms regarding bribery.

g) Risk attitudes

We include a dummy variable that measures risk aversion⁶ as individual willingness to behave illegally could also be a function of risk attitudes. It is interesting that few prior survey studies have controlled for risk attitudes, since risk aversion reduces the incentive to act illegally. Furthermore, controlling for risk attitudes affords better insights regarding the variables of age, gender, or economic situation. It could be argued that the observed difference between women and men or between different age groups is influenced by different risk attitudes functions.

h) Urbanization

Mocan (2004) stresses that in larger cities the extent of bribery may be higher since the scale of economic activities is larger and more varied in scope, resulting in increased contact with the government. Moreover, government officials may be less personal compared to those in smaller cities: this may reduce the opportunity costs of bribing. We use town size as a proxy for urbanization.⁷

i) Religion

⁶ Now I would like to ask you something about the things which would seem to you personally, most important if you were looking a job. Here are some of the things many people take into account in relation to their work. Regardless of whether you're actually looking for a job, which one would you, personally, place first if you were looking for a job?

1. A good income so that you do not have any worries about money
2. A safe job with no risk of closing down or unemployment
3. Working with people you like
4. Doing an important job which gives you a feeling of accomplishment

And what would be your second choice?

A dummy variable was built with the value 1, if someone has chosen 2 as first or as second choice.

⁷ V232. Size of town:

1. Under 2,000
 2. 2,000 - 5,000
 3. 5 - 10,000
 4. 10 - 20,000
 5. 20 - 50,000
 6. 50 - 100,000
 7. 100 - 500,000
 8. 500,000 and more.
-

Religion might influence people's habits and act as a restriction on engaging in illegal activities (Torgler 2006). We take the frequency of church attendance (CHURCH ATTENDANCE⁸) as the religious variable, showing approximately how much time individuals devote to religion. It is anticipated that this variable tells more about behavior than self-reported religious attitudes.

j) Political trust

Economists have recently started to pay attention to the determinants of trust through the literature on compliance (e.g. Torgler 2007). Trust in the state might influence citizens' positive attitudes and commitment to the rules of a society, which ultimately has a negative effect on illegal activities. Those institutions perceived by citizens as trustworthy, fair and efficient could act as constraints on corruption. We are exploring several different dimensions of trust, namely trust in the legal system⁹, trust in the government¹⁰, and trust in the parliament¹¹. The analysis will therefore cover trust at the constitutional and current politico-economic level. Controlling for this variable will better check the impact of political interest since individuals with a lower level of political trust might be frustrated and therefore less interested in following politics.

k) Voice, Accountability and Democratic Rights

We also control for institutional conditions. In particular, it is important to control for the citizens' opportunity to translate their political interest into political actions; i.e. whether they have a meaningful 'voice' in influencing the state (e.g., through voting processes). Holding such institutional conditions constant allows analysis of how strong political interest can affect corruption. In general, the greater the 'voice' of citizens, the less we expect to observe corruption, all other things being equal. A progressive government can attempt to increase or initiate co-operation and generate trust by developing functioning institutions. Furthermore, co-operation is enhanced when citizens are

⁸ Apart from weddings, funerals, and christenings, about how often do you attend religious services these days? More than once a week, once a week, once a month, only on special holy days, once a year, less often, never or practically never. (7 = more than once a week to 1 = never or practically never).

⁹ Could you tell me how much confidence you have in the legal system: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (4= a great deal to 1=none at all).

¹⁰ Could you tell me how much confidence you have in the government in your capital: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (4= a great deal to 1=none at all).

¹¹ Could you tell me how much confidence you have in parliament: Do you have a great deal of confidence, quite a lot of confidence, not very much confidence or no confidence at all? (4=a great deal of confidence to 1=no confidence at all).

satisfied with the way they are treated. On the other hand, if certain sectors of the government are not benevolent, strong institutional instruments have the potential to control politicians' discretionary power. Voter power helps limit the abuse of political power by selfish politicians especially since citizens cannot completely foresee the incumbents' preferences. The elements of direct democracy can also empower citizens with an instrument for controlling the government. Such control has an ex ante effect on policy formulation by elected incumbents in that they must always take into account possible voter intervention. Levi (1988) points out that a possible consequence of creating or maintaining compliance is to provide reassurance by the government. A government that precommits itself with democratic rules imposes self-restraints on its own power and thus sends a signal that taxpayers are seen as responsible persons. Furthermore, direct democratic rules signal that citizens are not ignorant or uncomprehending voters, which might create or maintain a certain social capital stock that should also affect the justifiability of corruption.

In the cross-country study we use Kaufmann et al. (2003) variable VOICE AND ACCOUNTABILITY for the year 1996. The variable measures the political process, civil liberties, and political rights of a country. We are going to use an index of the degree of direct democracy developed by Stutzer (1999) and applied in papers such as Frey and Stutzer (2000, 2002), Frey and Feld (2002), Torgler (2005), Schaltegger and Torgler (2007) when exploring Switzerland. The index reflects the extent of direct democratic participation (1= lowest and 6= highest degree of participation) at the cantonal level.

1) Regions

We will also control for regional differences considering the dummies CEE and FSU (Central Eastern and Former Soviet Union countries), LATIN AMERICA, ASIA and AFRICA¹². The reference group consists of WESTERN EUROPE + USA + AUSTRALIA. It can be assumed that there are regional differences in the perceived corruption and justifiability of corruption. We expect a lower perceived corruption in the reference group countries, based on a historically high standard of rule of law and accountable systems of governance. Furthermore, it is possible that a higher justifiability of corruption exists in countries where these important factors are lacking.

¹² Only one country represents Africa (Nigeria).

IV. EMPIRICAL EVIDENCE

We will use a *weighted* ordered probit estimation to correct the samples and thus to get a reflection of the national distribution. In estimations where several countries are pooled we have integrated an additional weighting variable. To obtain an equal number of weighted observations (around 1500) for each survey, the original weight variable was multiplied by a constant for each country¹³. The ordered probit models are relevant in such an analysis insofar as they help analyze the ranking information of the scaled dependent variable. However, since equations in the ordered probit estimation have a nonlinear form, only the sign of the coefficient can be directly interpreted and not its size. Calculating the marginal effects is therefore a method to find the quantitative effect of a variable on our dependent variable. The marginal effect indicates the change in the share of individuals (or the probability of) belonging to a specific perceived corruption (justifiability) level, when the independent variable increases by one unit. In all estimations the marginal effects are presented only for the highest value. Furthermore, it should be noticed that answers such as “don’t know” and missing values have been eliminated in all estimations.

4.1 International Evidence

Tables 1 to 6 present the first results. *Tables 1, 3* and *5* explore the justifiability of corruption as dependent variable, while *Tables 2, 4*, and *6* analyze the perceived corruption. *Tables 1* and *2* investigate the impact of political discussion. *Tables 3* and *4* take a look at the interest in politics and *Tables 5* and *6* report the findings focusing on the importance of politics. In all tables we present four specifications. This provides a robustness check of our main variable while taking into account that the number of observations decreases from one estimation to the other. The baseline specification is presented in the first regression. In a next step we add variables that measure individuals’ economic situation. In a third regression we include also the three variables on political trust. Finally, we report a fourth regression that controls for institutional conditions within a country, focusing on voice and accountability. The results clearly indicate that political interest matters: in 19 out of 20

¹³ The World Values Survey provides the weighting variables.

regressions the coefficient is statistically significant. We observe that a higher level of political interest leads to a lower justifiability of corruption and also to a lower perceived level of corruption. The marginal effects vary between 0.4 percentage points to 3.7 percentage points. Focusing on the justifiability of corruption, we were not able to observe a decrease in the impact of political interest when controlling for political trust and voice and accountability. On the contrary, we observe an increase in the marginal effects. For example, in *Table 1* we observe that an increase in the political discussion level by one unit increases the probability of stating that corruption is never justifiable by 1.3 percentage points. Looking at perceived corruption, we observe a decrease in the marginal effects. However, the results still indicate that the effects are not at all negligible. For example, specification (8) in *Table 2* indicates that an increase in the political discussion scale by one unit reduces the probability of reporting the highest level of corruption by 1.6 percentage points.

While we observe that political interest matters, we cannot observe a statistically significant correlation between education and our two dependent variables (showing a negative sign in both cases). Thus, informal education seems to be much more important than education. This finding suggests that it is important to generate “political human capital” rather than just generalized human capital.

Interestingly, we observe that voice and accountability reduces the justifiability of corruption and the perceived level of corruption. The coefficient is highly statistically significant in all specifications while also reporting large marginal effects. Thus, the findings indicate that a more legitimate and responsive state is an essential factor for a lower level of corruption. Similarly, political trust has a negative impact on the justifiability of corruption and the perceived level of corruption. The joint role played by political trust can be investigated using a Wald-test for coefficient restrictions to test for *joint* significance. In all cases we can observe that the null hypothesis is rejected, meaning that the political trust variables play a significant role in the determination of countries’ corruption level. Trust in the legal system provides the most consistent result in all the tables. Thus, trust at the constitutional level seems to be more important than trust at the current politico-economic level. The marginal effects are quite substantial, particularly for the perceived corruption regressions.

Looking at the other variables we observe that all age groups from 30 to 65+ have a significantly lower justifiability of corruption than the reference group below 30. Interestingly, we can observe that the marginal effects increase consistently with an increase of the age group. However, looking at the variable perceived

corruption, the coefficient is negative and statistically significant with marginal effects varying between 2.2 and 4.9 percentage points and increasing with age. Thus, the level of perceived corruption decreases with an increase in age. Furthermore, the results also indicate that there are gender differences. Being female rather than male increases the probability of a person stating that accepting a bribe is never justifiable. This result indicates that women's norms regarding bribery differs from the norms held by men. However, the perceived corruption coefficient is positive and statistically significant, indicating that women perceive corruption to be more widespread than men. Moreover, married people are more sensitive to the social norm regarding bribery than individuals with any other marital status. However, the coefficient is only statistically significant for the estimations using justifiability of corruption as the dependent variable. We observe that being in a higher income class leads to a lower justifiability of corruption and surprisingly, we also observe a negative correlation when focusing on perceived corruption. Self-employed people are more tolerant towards corruption and perceive corruption to be more common. Being risk averse is correlated with a lower justifiability of corruption. The coefficient is statistically significant in all the regressions. On the other hand, we don't observe a statistically significant relationship between perceived corruption and political interest. In line with our expectations we also observe a negative relationship between urbanization and justifiability of corruption and a negative between urbanization and perceived corruption. The results also show that church attendance is enforcing the norm of compliance. The correlation between church attendance and justifiability of corruption is positive, although the coefficient is not always statistically significant and the marginal effects are not that large. Not surprisingly, we find strong regional differences. Moreover, inhabitants of CEE and FSU, Latin America and Africa¹⁴ countries report a higher justifiability of bribing when compared to the reference group. Thus, the findings show that the social norm regarding bribery is unambiguously higher in Western Europe, USA and AUSTRALIA. We also observe that the reference group has the lowest perceived level of corruption.

In sum, the estimation results presented in *Table 1* to *6* suggest that political interest matters, controlling in a multivariate analysis for additional factors. This is consistent with the theoretical argument developed in Section II. It is interesting to observe the importance of political trust and voice and accountability in this context.

¹⁴ As mentioned, Africa only covers the country Nigeria. This explains why in some regressions Africa is no longer reported (variable not collected this survey).

It is reasonable to question the direction of causality in the results, and therefore our main hypothesis can be criticized. One can argue that a higher level of perceived corruption may lead to frustration with the lack of representative administration, and therefore to a lower willingness to invest in the maintenance of political interest. Similarly, a higher justifiability of corruption may induce individuals to be less interested in what happens in politics, although the causality problem may be more severe when focusing on individuals' perceived level of corruption. Thus, to evaluate the direct effect of political interest on corruption it is useful to investigate any potential causality problems through use of an instrumental variable technique. We present in *Table 7* six 2SLS estimations providing also detailed diagnostic tests to check the robustness of the results. For simplicity (and due to less causality problems) we will work with the second regression in the previous tables. The results remain robust when considering a broader specification. In the first three specifications we focus on the justifiability of corruption and the last three on the perceived corruption. The results indicate that all three political interest proxies are statistically significant with a positive sign.

Political interest is instrumented through an index that measures the importance of private interests¹⁵. We report the first-stage regression results of the instrumental variables and the F-tests of the exclusion of the instruments. Overall, the instrument used is effective in explaining political interest. The instrument is always statistically significant at the 1% level, as are the *F*-tests for the instrument exclusion set in the first-stage regressions. On the other hand, the variable is not correlated with our dependent variable. We also report the Anderson canonical correlations LR test for the relevance of the instruments. A rejection of the null hypothesis indicates that the model is identified and that the instruments are relevant (see Hall, Rudebusch and Wilcox 1996). Moreover, we also report the Anderson-Rubin test that the endogenous variables are jointly statistically significant. The test has the advantage of being robust to the presence of weak instruments. *Table 7* reports that in all cases the Anderson canonical correlations LR test shows rejection of the null hypothesis, which indicates that the models are identified and that the instruments are relevant. The Anderson-Rubin test is also statistically significant. In all the cases, this test fails to reject the null hypothesis that our instruments are valid. Thus, the 2SLS specifications also provide support that political interest matters.

¹⁵ Mean value of the following three questions: Please say, for each of the following, how important it is in your life: family, friends, leisure (very 4), (rather 3), not very (2), not at all (1).

4.2 Within-Country Evidence

In general, drawing conclusions from cross-cultural comparisons is difficult because not all features specific to a country can always be controlled in a satisfactory manner. Thus, we extend our study, focusing on within-country data from Switzerland at the state (cantonal) level to investigate the impact of tax morale and institutional quality. As mentioned previously, analyses of Swiss data are interesting because Switzerland's institutions are not homogeneous. The degree of institutionalized political participation rights varies strongly between the 26 Swiss cantons. In line with the previous regressions, we are going to investigate the third wave. This is the latest available data set for Switzerland as the country did not participate in the fourth wave. *Table 8* and *9* present the results. We make one small change to the specification structure: instead of voice and accountability we are going to include a democracy index¹⁶ measured at the cantonal level. The degree of direct democratic participation rights is measured with an index developed by Stutzer (1999). To maximize the number of available observations we first run regressions without the variable income¹⁷ as this variable would reduce the number of observations by almost 200 subjects. However, in a second step we are going to discuss the results of regressions where we include income as a control variable.

We observe that political interest also matters for Switzerland, and the quantitative effects are quite substantial. For example, increase in the political discussion scale by one unit raises the probability of stating that corruption is never justifiable by 4.9 percentage points. The effect is even more relevant in further specifications. For example, if we include income in the regression, we observe the coefficient for interest in politics in *Table 8* is statistically significant at the 1% level (t-value=2.15). Interestingly, we observe that a higher level of direct

¹⁶ It should be noticed that the Swiss World Value Survey was not random-random but quota-random, based on a random sample of communes and then on quotas in terms of sex, age, etc. in the selected communes. Thus, the smallest cantons are not necessarily represented (not represented are: Appenzell a. Rh., Glarus, Jura, Nidwalden, Uri, and Zug). On the other hand, the ISSP data set contains all 26 cantons.

¹⁷ Here is a scale of incomes (1-10). We would like to know in what group your household is, counting all wages, salaries, pensions and other incomes that come in. Just give the letter of the group your household falls into, before taxes and other deductions.

1. Less than 20'000 Swiss Francs
2. 20'000-26'999
3. 27'000-31'999
4. 32'000-37'999
5. 38'000-44'999
6. 45'000-51'999
7. 52'000-59'999
8. 60'000-69'999
9. 70'000-89'999
10. More than 90'000

democracy is positively correlated with a lower justifiability of corruption. We also observe the tendency that trust in the legal system matters, particularly when focusing on the perceived level of corruption. We have only included this political trust variable in the specification as it had the strongest impact on corruption in the previous six tables. In addition, it allows us to avoid a decrease in the number of observations. As in the previous approach, we also observe that age, gender and marital status (being married) matter for justifiability of corruption. On the other hand, risk attitudes are relevant when focusing on the perceived corruption rather than on the justifiability of corruption. Similarly, urbanization and self-employment status are not relevant at all. Moreover, religion is only relevant when focusing on perceived corruption. It is also worthwhile to note that we did not find a significant relationship between income and political interest in Switzerland. Finally, in line with the previous findings we observe that overall, formal education is less relevant than informal education or political interest. The coefficient is only statistically significant in *Table 9* and the marginal effects are below the values found for political interest. Thus, here we find additional support that human capital is mainly relevant in a specialized form.

V. CONCLUDING REMARKS

In recent years the topic of corruption has attracted a great deal of attention. However, there is still a lack of empirical evidence about the determinants of corruption at the micro level. Moreover, there are still interesting variables that have not been investigated in the past. This empirical study analyses a cross-section of individuals using data from the World Values Survey, investigating the determinants of corruption with two dependent variables: *perceived corruption* and the *justifiability of corruption*. Both variables are strongly correlated with other commonly used measurements of corruption such as the Transparency International Corruption Perception Index, the International Country Risk Guide Index or the Quality of Government Corruption Index. The major aim in the paper was to investigate whether political interest matters. Despite economists' increasing interest in the determinants of corruption, this factor has been widely neglected in the literature. Thus, it was highly relevant that we investigated empirically the possible connections between political interest and corruption.

To check the robustness we explored the relationship between political interest and corruption using three different proxies of political interest. The results clearly indicate that use of an education variable does not reflect

the accumulation and stock of human capital. A further strength of the paper is to focus not only on the *perceived* level of corruption, (as is commonly the case in the current literature), but also to consider the *justifiability* of bribery. Moreover, we have provided *cross-country* and *within-country evidence* at the micro level, controlling for the state of relevant institutional conditions. In this study, our focus on political interest required that we control for voice and accountability and direct democratic rights.

The econometric estimates also suggest that strength of social norms regarding bribery is higher and the perceived level of corruption lower in the reference group (region Western Europe, USA and Austria) compared to CEE and FSU countries, Latin America, Asia and Africa.

All in all, the results suggest some interesting political implications. Increasing the level of interest in politics may help to reduce the level of corruption in a society. The results also suggest that it may be important to place more emphasis on institutions that enhance voice and accountability and democratic participation rights. This helps to increase individuals' social norm and perception of compliance. Thus, the results presented in this paper mirror those in previous studies and underscore the importance of accountability as an essential aspect for the efficient functioning of a government and the existing institutional architecture. However, understanding how corruption can be reduced and how government can foster political interest remains a fruitful field for further research.

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Table 1

Justifiability of Corruption and Political Discussion

[illegible]

VOICE AND ACCOUNT.										0.113***	7.43	0.036
<i>l) Geographic Region</i>												
CEE and FSU	-0.380***	-20.50	-0.121	-0.382***	-19.87	-0.122	-0.377***	-18.88	-0.120			
LATIN AMERICA	-0.430***	-17.92	-0.147	-0.429***	-17.50	-0.147	-0.418***	-16.56	-0.143	-0.263***	-5.82	-0.084
ASIA	0.204***	6.31	0.061	0.348***	9.64	0.098	0.360***	9.28	0.101	-0.030	-0.68	-0.009
AFRICA	-0.230***	-3.91	-0.078	-0.193***	-3.17	-0.065	-0.228***	-3.60	-0.077	0.611***	11.26	0.157
Wald-test joint sign. polit. trust							30.660					
Pseudo R2	0.025			0.027			0.027			0.034		
Number of observations	41714			39669			36726			20373		
Prob > chi2	0.000			0.000			0.000			0.000		

Notes: In the reference group are AGE<30, MAN, SINGLE, LOWER MIDDLE AND LOWER CLASS, OTHER EMPLOYMENT STATUS, RISK TAKER, WESTERN EUROPE + USA + AUSTRALIA. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Marginal effect = highest score (10, never justifiable). The higher the value the lower the justifiability. CEE: Central Eastern European Countries, FSU: Former Soviet Union Countries.

Table 2

Perceived Corruption and Political Discussion

[illegible]

VOICE AND ACCOUNT.										-0.159***	-11.240	-0.045
<i>1) Geographic Region</i>												
CEE and FSU	0.940***	58.66	0.294	0.894***	53.98	0.280	0.918***	53.36	0.281	0.979***	24.51	0.288
LATIN AMERICA	0.680***	30.80	0.236	0.635***	28.18	0.220	0.632***	27.17	0.214	0.590***	14.88	0.183
ASIA	0.542***	20.52	0.192	0.523***	19.37	0.185	0.760***	25.67	0.274	0.889***	20.39	0.311
AFRICA	1.276***	21.64	0.475	1.250***	20.26	0.466	1.320***	19.67	0.488			
Wald-test joint sign. polit. trust							1867.92					
Pseudo R2	0.025			0.027			0.027			0.106		
Number of observations	41714			39669			36726			18942		
Prob > chi2	0.000			0.000			0.000			0.000		

Notes: In the reference group are AGE<30, MAN, SINGLE, LOWER MIDDLE AND LOWER CLASS, OTHER EMPLOYMENT STATUS, RISK TAKER, WESTERN EUROPE + USA + AUSTRALIA. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Marginal effect = highest score (4). The higher the value the lower the justifiability. CEE: Central Eastern European Countries, FSU: Former Soviet Union Countries.

Table 3

Justifiability of Corruption and Interest in Politics

WEIGHTED ORDERED PROBIT	Coeff	z-Stat. (9)	Marg.	Coeff.	z-Stat. (10)	Marg.	Coeff.	z-Stat. (11)	Marg.	Coeff.	z-Stat. (12)	Marg.
a) Political Interest												
INTEREST POLITICS	0.013	1.57	0.004	0.018**	2.22	0.006	0.016*	1.87	0.005	0.041***	3.58	0.013
b) Education												
FORMAL	0.001	0.24	0.0003	0.002	0.66	0.001	0.007*	1.82	0.002	0.004	0.73	0.001
c) Demographic Factors												
AGE 30-49	0.190***	10.30	0.060	0.190***	10.05	0.060	0.193***	9.91	0.061	0.178***	6.96	0.056
AGE 50-64	0.390***	16.32	0.113	0.396***	16.19	0.115	0.398***	15.64	0.116	0.374***	11.13	0.108
AGE 65+	0.504***	15.54	0.137	0.525***	15.66	0.142	0.529***	15.10	0.143	0.526***	11.40	0.141
FEMALE	0.136***	9.50	0.043	0.139***	9.47	0.044	0.138***	9.06	0.044	0.151***	7.56	0.048
d) Marital Status												
MARRIED	0.123***	6.50	0.039	0.119***	6.16	0.038	0.124***	6.24	0.040	0.119***	4.52	0.038
WIDOWED	0.146***	4.11	0.044	0.136***	3.70	0.041	0.132***	3.45	0.040	0.088*	1.81	0.027
DIVORCED	0.016	0.44	0.005	0.006	0.17	0.002	0.012	0.32	0.004	0.015	0.29	0.005
SEPARATED	0.068	1.28	0.021	0.075	1.40	0.023	0.097*	1.76	0.030	0.083	1.15	0.025
e) Economic Variables												
UPPER CLASS				-0.203***	-3.82	-0.069	-0.193***	-3.46	-0.065	-0.158**	-2.22	-0.052
UPPER MIDDLE CLASS				-0.021	-1.04	-0.007	-0.033	-1.62	-0.011	-0.033	-1.15	-0.010
f) Employment Status												
SELFEMPLOYED	-0.065**	-2.48	-0.021	-0.070***	-2.62	-0.023	-0.063**	-2.27	-0.020	-0.098***	-2.82	-0.032
g) Risk Attitudes												
RISK AVERSE	0.077***	4.97	0.024	0.072***	4.53	0.023	0.074***	4.48	0.023	0.078***	3.52	0.024
h) Urbanization												
URBANIZATION	-0.006**	-2.29	-0.002	-0.006**	-2.05	-0.002	-0.004	-1.48	-0.001	-0.008*	-1.94	-0.002
i) Religiosity												
CHURCH ATTENDANCE	0.010***	2.67	0.003	0.007*	1.72	0.002	0.005	1.19	0.002	-0.001	-0.22	0.000
j) Political Trust												
LEGAL SYSTEM							0.039***	3.94	0.012	0.069***	5.34	0.022
GOVERNMENT							-0.009	-0.78	-0.003	0.036**	2.46	0.011
PARLIAMENT							0.021*	1.76	0.007	0.014	0.92	0.004

<i>k) Institutional Conditions</i> VOICE AND ACCOUNT.												
							-0.375***	-18.84	-0.120	0.117***	7.71	0.037
<i>l) Geographic Region</i>												
CEE and FSU	-0.379***	-20.45	-0.121	-0.380***	-19.78	-0.121	-0.417***	-16.47	-0.143	-0.252***	-5.58	-0.080
LATIN AMERICA	-0.430***	-17.86	-0.147	-0.425***	-17.29	-0.145	0.368***	9.55	0.104	-0.020	-0.47	-0.006
ASIA	0.212***	6.57	0.063	0.357***	9.96	0.101	-0.212***	-3.40	-0.072	0.620***	11.51	0.160
AFRICA	-0.226***	-3.90	-0.077	-0.184***	-3.08	-0.062						
Wald-test joint sign. polit. trust							26.80***					
Pseudo R2	0.025			0.027			0.027			0.034		
Number of observations	42056			40002			37018			20576		
Prob > chi2	0.000			0.000			0.000			0.000		

Notes: In the reference group are AGE<30, MAN, SINGLE, LOWER MIDDLE AND LOWER CLASS, OTHER EMPLOYMENT STATUS, RISK TAKER, WESTERN EUROPE + USA + AUSTRALIA. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Marginal effect = highest score (10, never justifiable). The higher the value the lower the justifiability. CEE: Central Eastern European Countries, FSU: Former Soviet Union Countries.

Table 4

Perceived Corruption and Political Interest

WEIGHTED ORDERED PROBIT	Coeff	z-Stat. (13)	Marg.	Coeff.	z-Stat. (14)	Marg.	Coeff.	z-Stat. (15)	Marg.	Coeff.	z-Stat. (16)	Marg.
a) Political Interest												
INTEREST IN POLITICS	-0.090***	-12.31	-0.028	-0.087***	-11.80	-0.027	-0.053***	-6.80	-0.016	-0.055***	-5.28	-0.016
b) Education												
FORMAL	-0.003	-0.89	-0.001	0.006**	2.13	0.002	0.0003	0.09	0.0001	-0.009**	-2.06	-0.003
c) Demographic Factors												
AGE 30-49	-0.027	-1.58	-0.008	-0.037**	-2.17	-0.012	-0.058***	-3.22	-0.018	-0.021	-0.90	-0.006
AGE 50-64	-0.068***	-3.27	-0.021	-0.073***	-3.43	-0.023	-0.076***	-3.38	-0.023	-0.018	-0.60	-0.005
AGE 65+	-0.138***	-5.09	-0.041	-0.137***	-4.97	-0.041	-0.116***	-4.03	-0.034	-0.076*	-1.90	-0.021
FEMALE	0.002	0.13	0.001	0.009	0.67	0.003	0.006	0.43	0.002	-0.007	-0.36	-0.002
d) Marital Status												
MARRIED	0.012	0.69	0.004	0.012	0.65	0.004	0.026	1.40	0.008	-0.023	-0.91	-0.007
WIDOWED	-0.022	-0.73	-0.007	-0.036	-1.17	-0.011	-0.008	-0.25	-0.002	-0.096**	-2.31	-0.027
DIVORCED	0.076**	2.31	0.024	0.069**	2.02	0.022	0.068*	1.94	0.021	0.105**	2.21	0.031
SEPARATED	0.075	1.63	0.024	0.070	1.49	0.022	0.075	1.55	0.023	0.050	0.79	0.015
e) Economic Variables												
UPPER CLASS				-0.018	-0.36	-0.006	0.033	0.63	0.010	-0.140**	-2.21	-0.038
UPPER MIDDLE CLASS				-0.228***	-13.16	-0.067	-0.186***	-10.40	-0.054	-0.162***	-6.40	-0.044
f) Employment Status												
SELFEMPLOYED	0.037	1.51	0.012	0.050**	2.05	0.016	0.016	0.61	0.005	0.039	1.27	0.011
g) Risk Attitudes												
RISK AVERSE	0.017	1.25	0.005	0.005	0.36	0.002	0.001	0.07	0.000	0.007	0.35	0.002
h) Urbanization												
URBANIZATION	0.034***	13.61	0.011	0.035***	13.56	0.011	0.025***	9.16	0.007	0.005	1.45	0.001
i) Religiosity												
CHURCH ATTENDANCE	0.003	0.85	0.001	0.004	1.27	0.001	0.019***	5.08	0.006	0.010**	1.99	0.003

j) Political Trust												
LEGAL SYSTEM							-0.154***	-17.05	-0.047	-0.160***	-13.15	-0.046
GOVERNMENT							-0.123***	-12.17	-0.037	-0.131***	-9.81	-0.037
PARLIAMENT							-0.166***	-15.59	-0.050	-0.153***	-11.07	-0.044
k) Institutional Conditions												
VOICE AND ACCOUNT.										-0.163***	-11.480	-0.047
l) Geographic Region												
CEE and FSU	0.922***	57.45	0.289	0.879***	53.05	0.276	0.908***	52.68	0.278	0.966***	24.21	0.285
LATIN AMERICA	0.644***	28.98	0.223	0.603***	26.60	0.208	0.617***	26.29	0.208	0.574***	14.46	0.178
ASIA	0.552***	21.00	0.196	0.533***	19.84	0.189	0.772***	26.22	0.278	0.897***	20.71	0.315
AFRICA	1.273***	21.93	0.474	1.251***	20.53	0.466	1.320***	19.86	0.488			
Wald-test joint sign. polit. trust							1801.40					
Pseudo R2	0.058			0.059			0.090			0.106		
Number of observations	38646			37245			34752			19136		
Prob > chi2	0.000			0.000			0.000			0.000		

Notes: In the reference group are AGE<30, MAN, SINGLE, LOWER MIDDLE AND LOWER CLASS, OTHER EMPLOYMENT STATUS, RISK TAKER, WESTERN EUROPE + USA + AUSTRALIA. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Marginal effect = highest score (4). The higher the value the lower the justifiability. CEE: Central Eastern European Countries, FSU: Former Soviet Union Countries.

Table 5

Justifiability of Corruption and Importance of Politics in Life

[illegible]

CHURCH ATTENDANCE	0.011***	2.80	0.003	0.008**	1.97	0.002	0.006	1.38	0.002	-0.001	-0.12	0.000
<i>j) Political Trust</i>												
LEGAL SYSTEM							0.040***	4.09	0.013	0.070***	5.32	0.022
GOVERNMENT							-0.009	-0.80	-0.003	0.035**	2.36	0.011
PARLIAMENT							0.018	1.51	0.006	0.008	0.54	0.003
<i>k) Institutional Conditions</i>												
VOICE AND ACCOUNT.				-0.381***	-19.72	-0.121	-0.373***	-18.65	-0.119	0.132***	8.56	0.042
<i>l) Geographic Region</i>												
CEE and FSU	-0.381***	-20.48	-0.122	-0.435***	-17.73	-0.149	-0.425***	-16.85	-0.146	-0.226***	-4.98	-0.072
LATIN AMERICA	-0.437***	-18.23	-0.150	0.354***	9.83	0.100	0.367***	9.50	0.103	-0.027	-0.62	-0.009
ASIA	0.212***	6.56	0.063	-0.217***	-3.60	-0.073	-0.245***	-3.91	-0.084	0.630***	11.67	0.161
AFRICA	-0.248***	-4.28	-0.085									
Wald-test joint sign. polit. trust							26.16***					
Pseudo R2	0.025			0.027			0.027			0.034		
Number of observations	41631			39614			36720			20410		
Prob > chi2	0.000			0.000			0.000			0.000		

Notes: In the reference group are AGE<30, MAN, SINGLE, LOWER MIDDLE AND LOWER CLASS, OTHER EMPLOYMENT STATUS, RISK TAKER, WESTERN EUROPE + USA + AUSTRALIA. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Marginal effect = highest score (10, never justifiable). The higher the value the lower the justifiability. CEE: Central Eastern European Countries, FSU: Former Soviet Union Countries.

Table 6

Perceived Corruption and Importance of Politics in Life

WEIGHTED ORDERED PROBIT	Coeff	z-Stat. (21)	Marg.	Coeff.	z-Stat. (22)	Marg.	Coeff.	z-Stat. (23)	Marg.	Coeff.	z-Stat. (24)	Marg.
a) Political Interest												
IMPORTANCE OF POLITICS	-0.047***	-6.59	-0.015	-0.045***	-6.23	-0.014	-0.001	-0.15	-0.0003	-0.031***	-3.01	-0.009
b) Education												
FORMAL	-0.007**	-2.52	-0.002	0.002	0.70	0.001	-0.004	-1.27	-0.001	-0.011**	-2.54	-0.003
c) Demographic Factors												
AGE 30-49	-0.036**	-2.16	-0.011	-0.048***	-2.77	-0.015	-0.067***	-3.71	-0.020	-0.023	-0.99	-0.007
AGE 50-64	-0.085***	-4.04	-0.026	-0.090***	-4.19	-0.028	-0.091***	-4.08	-0.027	-0.021	-0.71	-0.006
AGE 65+	-0.152***	-5.62	-0.045	-0.153***	-5.52	-0.046	-0.131***	-4.52	-0.038	-0.078*	-1.94	-0.022
FEMALE	0.018	1.38	0.006	0.024*	1.84	0.008	0.020	1.45	0.006	0.002	0.08	0.000
d) Marital Status												
MARRIED	0.011	0.62	0.003	0.011	0.61	0.003	0.026	1.36	0.008	-0.026	-1.02	-0.007
WIDOWED	-0.033	-1.11	-0.010	-0.045	-1.45	-0.014	-0.016	-0.48	-0.005	-0.110***	-2.64	-0.030
DIVORCED	0.076**	2.30	0.024	0.068**	2.02	0.022	0.067*	1.89	0.021	0.101**	2.12	0.030
SEPARATED	0.060	1.29	0.019	0.054	1.13	0.017	0.061	1.24	0.019	0.031	0.49	0.009
e) Economic Variables												
UPPER CLASS				-0.026	-0.51	-0.008	0.022	0.43	0.007	-0.157**	-2.52	-0.042
UPPER MIDDLE CLASS				-0.239***	-13.75	-0.070	-0.195***	-10.88	-0.056	-0.171***	-6.72	-0.046
f) Employment Status												
SELFEMPLOYED	0.032	1.31	0.010	0.047*	1.91	0.015	0.015	0.58	0.005	0.036	1.17	0.011
g) Risk Attitudes												
RISK AVERSE	0.018	1.31	0.006	0.005	0.37	0.002	0.003	0.22	0.001	0.005	0.28	0.002

h) Urbanization												
URBANIZATION	0.034***	13.43	0.011	0.035***	13.43	0.011	0.024***	8.97	0.007	0.005	1.40	0.001
i) Religiosity												
CHURCH ATTENDANCE	0.004	1.02	0.001	0.005	1.42	0.002	0.019***	5.12	0.006	0.012**	2.27	0.003
j) Political Trust												
LEGAL SYSTEM							-0.154***	-16.99	-0.047	-0.160***	-13.13	-0.046
GOVERNMENT							-0.124***	-12.18	-0.037	-0.130***	-9.70	-0.037
PARLIAMENT							-0.172***	-16.03	-0.052	-0.156***	-11.15	-0.045
k) Institutional Conditions												
VOICE AND ACCOUNT.										-0.164***	-11.480	-0.047
l) Geographic Region												
CEE and FSU	0.928***	57.43	0.291	0.883***	52.91	0.277	0.916***	52.73	0.281	0.967***	24.02	0.286
LATIN AMERICA	0.684***	31.10	0.238	0.641***	28.49	0.222	0.643***	27.69	0.218	0.599***	15.13	0.187
ASIA	0.577***	21.99	0.206	0.559***	20.87	0.199	0.792***	27.02	0.286	0.914***	21.09	0.321
AFRICA	1.305***	22.13	0.485	1.280***	20.78	0.476	1.327***	19.87	0.491			
Wald-test joint sign. polit. trust							1828.520					
Pseudo R2	0.057			0.058			0.090			0.105		
Number of observations	38277			36899			34476			18979		
Prob > chi2	0.000			0.000			0.000			0.000		

Notes: In the reference group are AGE<30, MAN, SINGLE, LOWER MIDDLE AND LOWER CLASS, OTHER EMPLOYMENT STATUS, RISK TAKER, WESTERN EUROPE + USA + AUSTRALIA. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. Marginal effect = highest score (4). The higher the value the lower the justifiability. CEE: Central Eastern European Countries, FSU: Former Soviet Union Countries.

Table 7

2SLS

WEIGHTED ORDERED PROBIT	JUSTIFIABILITY OF CORRUPTION						PERCEIVED CORRUPTION					
	Coeff. (25)	t-stat.	Coeff. (26)	t-stat.	Coeff. (27)	t-stat.	Coeff. (28)	t-stat.	Coeff. (29)	t-stat.	Coeff. (30)	t-stat.
a) Political Interest												
POLITICAL DISCUSSION	1.520***	4.33					-0.352***	-2.74				
INTEREST IN POLITICS			0.997**	4.32					-0.234***	-2.69		
IMPORTANCE OF POLITICS					0.323***	4.67					-0.080***	-2.76
b) Education												
FORMAL	-0.077***	-3.95	-0.086***	-4.00	-0.021***	-2.90	0.017**	2.40	0.019**	2.42	0.005	1.53
c) Demographic Factors												
AGE 30-49	0.098*	1.87	0.126***	2.63	0.246***	7.86	-0.0001	0.00	-0.003	-0.17	-0.033***	-2.67
AGE 50-64	0.219***	2.82	0.245***	3.31	0.449***	11.98	-0.008	-0.26	-0.008	-0.28	-0.057***	-3.54
AGE 65+	0.422***	7.01	0.348***	4.77	0.524***	11.97	-0.083***	-3.30	-0.060*	-1.96	-0.106***	-5.13
FEMALE	0.447***	6.71	0.418***	6.85	0.221***	9.36	-0.039	-1.62	-0.035	-1.55	0.010	0.94
d) Marital Status												
MARRIED	0.098***	2.58	0.117***	3.26	0.160***	5.04	0.027*	1.88	0.020	1.50	0.013	1.02
WIDOWED	0.180***	3.55	0.139***	2.76	0.173***	3.84	-0.024	-1.02	-0.016	-0.70	-0.026	-1.17
DIVORCED	-0.043	-0.66	-0.005	-0.08	0.024	0.42	0.061**	2.40	0.058**	2.33	0.051**	2.14
SEPARATED	0.117	1.33	0.080	0.92	0.153*	1.93	0.038	1.11	0.057	1.68	0.034	1.01

<i>e) Economic Variables</i>												
UPPER CLASS	-0.311***	-3.02	-0.354***	-3.52	-0.295***	-3.30	0.012	0.31	0.009	0.23	-0.006	-0.15
UPPER MIDDLE CLASS	-0.103***	-2.80	-0.137***	-3.35	-0.037	-1.32	-0.151***	-10.73	-0.141***	-8.80	-0.165***	-13.26
<i>f) Employment Status</i>												
SELFEMPLOYED	-0.057	-1.23	-0.063	-1.38	-0.055	-1.31	0.034*	1.87	0.032*	1.79	0.033*	1.89
<i>g) Risk Attitudes</i>												
RISK AVERSE	0.102***	4.20	0.132***	5.21	0.110***	5.01	0.000	-0.01	-0.008	-0.78	-0.003	-0.26
<i>h) Urbanization</i>												
URBANIZATION	-0.010**	-2.09	-0.004	-0.92	-0.006	-1.50	0.025***	13.12	0.024***	12.81	0.024***	13.23
<i>i) Religiosity</i>												
CHURCH ATTENDANCE	0.016***	2.65	0.005	0.88	0.007	1.26	0.002	0.82	0.004	1.63	0.004*	1.69
<i>j) Geographic Region</i>												
CEE and FSU	-0.390***	-14.01	-0.224***	-4.01	-0.357***	-12.53	0.638***	54.03	0.598***	28.09	0.626***	47.63
LATIN AMERICA	-0.318***	-3.24	-0.187	-1.49	-0.648***	-16.68	0.382***	10.82	0.354***	7.66	0.457***	28.02
ASIA	0.385***	7.87	0.422***	7.86	0.246***	8.30	0.354***	15.60	0.361***	15.08	0.405***	21.15
AFRICA	-0.104	-1.08	-0.126	-1.32	-0.336***	-4.10	0.852***	21.08	0.858***	21.78	0.911***	23.21
First stage regressions:												
Political Interest												
Private Interests	0.079***	9.87	0.117***	10.34	0.355***	30.15	0.083***	10.03	0.120***	10.23	0.359***	29.39
F-Test of excluded instruments	97.46***		107.02***		909.31***		100.60***		104.73***		863.69***	
Anderson canon. corr. likelihood ratio stat.	121.05***		134.29***		1166.46***		213.87***		131.41***		1104.95***	
Anderson-Rubin test	24.02***		23.09***		22.29***		7.92***		7.46***		7.64***	
Number of observations	38888		39212		39008		36232		36530		36354	
Prob > F	0.000		0.000		0.000		0.000		0.000		0.000	

Notes: In the reference group are AGE<30, MAN, SINGLE, LOWER MIDDLE AND LOWER CLASS, OTHER EMPLOYMENT STATUS, RISK TAKER, WESTERN EUROPE + USA + AUSTRALIA. Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01. CEE: Central Eastern European Countries, FSU: Former Soviet Union Countries.

RISK AVERSE	0.109	1.07	0.030	0.105	1.05	0.029	0.100	0.99	0.027
<i>g) Urbanization</i>									
URBANIZATION	-0.005	-0.20	-0.001	-0.005	-0.20	-0.001	-0.013	-0.53	-0.004
<i>h) Religiosity</i>									
CHURCH ATTENDANCE	-0.008	-0.30	-0.002	-0.008	-0.29	-0.002	-0.022	-0.80	-0.006
<i>i) Political Trust</i>									
LEGAL SYSTEM	0.115*	1.69	0.032	0.109	1.58	0.030	0.126*	1.83	0.034
<i>j) Institutional Conditions</i>									
DEMOCRACY	0.030	0.79	0.008	0.027	0.72	0.008	0.013	0.35	0.004
Pseudo R2	0.049			0.048			0.055		
Number of observations	1086			1086			1075		
Prob > chi2	0.000			0.000			0.000		

Notes: In the reference group are AGE<30, MAN, SINGLE, OTHER EMPLOYMENT STATUS, RISK TAKER, Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01.

Table 9
Perceived Corruption in Switzerland

WEIGHTED ORDERED PROBIT	Coeff	z-Stat. -1	Marg.	Coeff.	z-Stat. -2	Marg.	Coeff.	z-Stat. -3	Marg.
a) Political Interest									
POLITICAL DISCUSSION	-0.067	-0.97	-0.008						
INTEREST IN POLITICS				-0.114**	-2.19	-0.014			
IMPORTANCE OF POLITICS							-0.100**	-2.00	-0.012
b) Education									
FORMAL	-0.057**	-2.30	-0.007	-0.049*	-1.94	-0.006	-0.053**	-2.12	-0.007
c) Demographic Factors									
AGE 30-49	0.066	0.52	0.008	0.078	0.62	0.010	0.096	0.75	0.012
AGE 50-64	-0.050	-0.33	-0.006	-0.022	-0.15	-0.003	-0.032	-0.21	-0.004
AGE 65+	-0.245	-1.42	-0.027	-0.214	-1.23	-0.024	-0.197	-1.12	-0.022
FEMALE	-0.251***	-2.88	-0.031	-0.265***	-3.00	-0.033	-0.253***	-2.88	-0.031
d) Marital Status									
MARRIED	0.025	0.21	0.003	0.016	0.14	0.002	0.007	0.06	0.001
WIDOWED	-0.449*	-1.91	-0.042	-0.458*	-1.92	-0.042	-0.459*	-1.92	-0.041
DIVORCED	-0.098	-0.44	-0.011	-0.132	-0.58	-0.015	-0.117	-0.52	-0.013
SEPARATED	-0.273	-0.62	-0.028	-0.267	-0.61	-0.027	-0.310	-0.68	-0.030
e) Employment Status									
SELFEMPLOYED	-0.010	-0.07	-0.001	-0.014	-0.09	-0.002	-0.057	-0.40	-0.007
f) Risk Attitudes									
RISK AVERSE	-0.175*	-1.90	-0.021	-0.183***	-1.97	-0.022	-0.157*	-1.71	-0.018
g) Urbanization									
URBANIZATION	-0.036	-1.54	-0.005	-0.034	-1.43	-0.004	-0.037	-1.56	-0.005
h) Religiosity									
CHURCH ATTENDANCE	-0.051**	-2.21	-0.006	-0.049**	-2.13	-0.006	-0.047**	-2.00	-0.006
i) Political Trust									
LEGAL SYSTEM	-0.478***	-7.30	-0.060	-0.477***	-7.31	-0.059	-0.465***	-7.11	-0.057
j) Institutional Conditions									
DIRECT DEMOCRACY	-0.103***	-3.00	-0.013	-0.098***	-2.87	-0.012	-0.099***	-2.88	-0.012

Pseudo R2	0.077	0.080	0.077
Number of observations	1019	1018	1008
Prob > chi2	0.000	0.000	0.000

Notes: In the reference group are AGE<30, MAN, SINGLE, OTHER EMPLOYMENT STATUS, RISK TAKER, Significance levels: * 0.05 < p < 0.10, ** 0.01 < p < 0.05, *** p < 0.01.

APPENDIX

Table A1

Countries in the Sample (34 countries)

countries	
Armenia	Moldova
Australia	Nigeria.
Azerbaijan	Norway
Bangladesh	Peru
Belarus	Philippines
Bosnia-Hercegovina	Russia
Brazil	Serbia
Bulgaria	Slovenia
Chile	Spain
Croatia	Switzerland
Estonia	Taiwan
Finland	Ukraine
India	Uruguay
Latvia	USA
Lithuania	Venezuela
Macedonia	Western Germany ^a
Mexico	Eastern Germany ^a

Notes: ^a The data allows differentiation between East and West Germany.